

Serial No. 09/872,362
Amdt. Dated October 6, 2004
Reply to Office Action of July 6, 2004

REMARKS/ARGUMENTS

Prior to this Amendment, claims 1-57 were pending in the application. Claim 1 is amended to clarify the method of the invention including providing "design pattern" and how a set of design patterns can be used to address a new programming situation. Claim 2 is amended to include the limitations of now-canceled claims 3-5, and new claims 58-60 are added to further define "design patterns" according to embodiments of the invention and how matches are selected. Independent claims 20 and 39 are amended to clarify the "design pattern" limitation and further distinguish these claims from the references of record.

No new matter is added, and claims 1, 2, and 6-60 remain for consideration by the Examiner.

Claim Rejections Under 35 U.S.C. §112

In the July 6, 2004 Office Action, claims 19, 38, and 57 were rejected under 35 U.S.C. §112, second paragraph as being indefinite due to the use of the term "service island proxy integrator design pattern" which the Examiner did not believe was a term recognized in the computer art.

Claims 19, 38, and 57 are amended to better define this design pattern, and when considered with the amendments to the base claim, i.e., claim 1, the method of claim 19 is believed to be definite and comply with §112, second paragraph.

Claim Rejections Under 35 U.S.C. §102

The Office Action also rejected claims 1-57 under 35 U.S.C. §102(a) as being anticipated by Using Rose (March 2000). This rejection is traversed based on the following remarks.

Independent claim 1 is directed to a method for providing a design pattern that includes "providing a plurality of design patterns having differing types, each of

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the design patterns comprising a description of design issues addressed by the particular design pattern and of the solution provided by the particular design pattern." Input is received "defining a programming problem" and then, a match of one of the types of the patterns is determined. A plurality of instances of the matched type are then provided which is followed by receiving selection input and returning the selected one of the design pattern instances. Using Rose fails to teach or even suggest each of the elements of the method of claim 1 and hence, claim 1 is allowable over this reference.

More particularly, Using Rose fails to teach the "providing" step of claim 1 in which the design patterns each define a design issue addressed and a solution provided by the design pattern for that design issue. Using Rose, at page 1 and elsewhere, teaches the use of "Rational Rose" for developing software using a model-diagram architecture that is particularly suited for use with UML, COM and the like. Using Rose provides highly visual tools for generating new software and applications. However, Applicants were unable to identify anywhere in Using Rose that teaches a "providing a plurality of design patterns" that each comprise a description of the design issues or problems they address and a solution that the design pattern provides for those design issues. Using Rose appears to allow past models to be used in generating additional applications but there is no teaching or suggestion of the providing step of claim 1. Because this element is not shown, claim 1 is allowable over Using Rose and the rejection should be withdrawn.

Further, claim 1 calls for receiving input "defining a programming problem" and in response "determining a matching one of the types of design patterns based on the receive input." The Office Action cites Using Rose at pages 22, 23, 25, 32, and 48 for teaching "determining a type of design pattern." However, at these citations, Using Rose is describing user interfaces for creating a programming model using a browser. There is no teaching of determining a matching type of design

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pattern from a plurality of differing types based on input defining a programming problem (e.g., comparing the programming problem with the design issues as claimed in dependent claim 60). Additionally, a number of instances of the matched type of design pattern are provided and a selection is received. Using Rose may teach providing previously built models but does not teach matching a design pattern based on user input of a design problem and then allowing the user to select from a set of instances that match the input problem. For these additional reasons, claim 1 is allowable over Using Rose.

Claims 2 and 6-19 depend from claim 1 and are believed allowable as depending from an allowable base claim. Further, claims 10-19 call for the selected design pattern to have a particular configuration, e.g., be a mediator view design pattern, be a service to workers design pattern, and the like. The Office Action provides numerous citations to Using Rose for teaching these various design patterns. However, as discussed with reference to claim 1, Using Rose does not define a design pattern comprising a description of a design issue and of a solution to such design issue. Further, Using Rose does not teach the specific design issues and solutions for each of these specific types of design patterns (e.g., as defined in the specification for each pattern type). For these additional reasons, claims 10-19 are believed allowable over Using Rose.

New claims 58-60 add additional features to the method of claim 1 that are not taught or suggested by Using Rose. None of the models of Using Rose include sample code as called for in claim 58, include participants or constraints to design patterns, or teach a matching process for patterns based on input programming problems.

Independent claims 20 and 39 are amended to include limitations similar to that of claim 1, and the reasons provided for allowing claim 1 are believed equally

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applicable to these two claims. Claim 20 also calls for the design pattern to provide sample code, which is not shown by Using Rose, and the rejection of claim 20 should be withdrawn for this additional reason. Claim 39 calls for the matching of the design pattern to be performed by comparing the received input with the design issues of the differing design pattern types, and Using Rose fails to teach such a matching step with its visual programming techniques. Hence, claim 39 is believed allowable over Using Rose for this additional reason.

Claims 21-38 and 40-57 depend from claims 20 and 39, respectively, and are believed allowable as depending from allowable base claims. Further, the arguments provided for allowing claims 10-19 over Using Rose are applicable to claims 29-38 and 48-57.

Conclusions

The references made of record but not relied upon have been considered but are believed to be no more relevant than Using Rose. The pending claims are believed in condition for allowance over Using Rose and the references made of record considered alone or in any combination.

No fee is believed due for this submittal. However, any fee deficiency associated with this submittal may be charged to Deposit Account No. 50-1123.

It is requested that a timely Notice of Allowance be issued in this case.

Respectfully submitted,



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